APICAL INDUSTRIES, INCORPORATED
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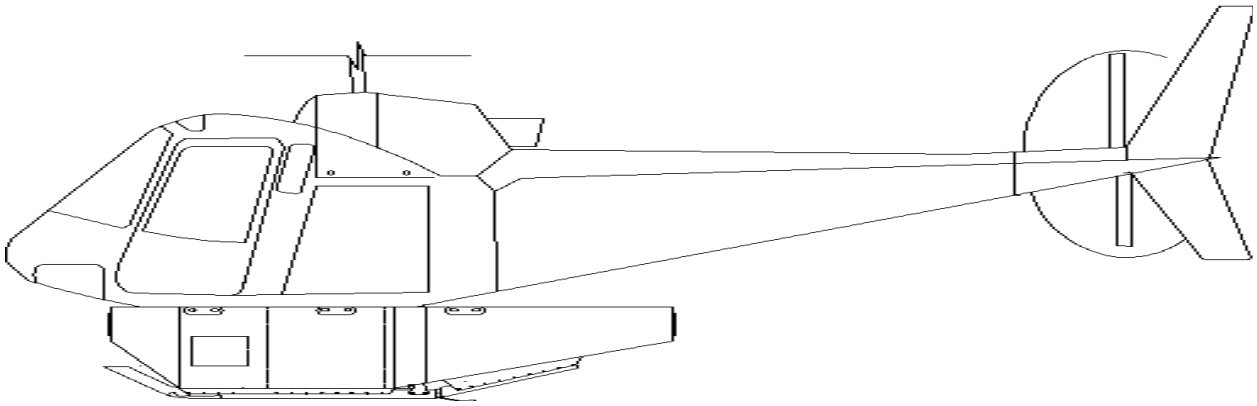
ICA350-2
Rev. N/C
97Oct02

INSTRUCTIONS FOR CONTINUED AIRWORTHINESS

FOR

UTILITY HELICOPTER FLOAT ASSEMBLIES
EUROCOPTER HELICOPTER AS-350

FLOAT ASSEMBLY - P/N 20331-101 AND 20331-102



LOG OF ACCEPTED REVISIONS

Apical Industries, Incorporated's Instructions for Continued Airworthiness (ICA) for the Eurocopter AS-350 rotorcraft except for the Airworthiness Limitations Section (ALS) were reviewed by the Fort Worth Aircraft Evaluation Group (FTW AEG) and found to contain the applicable requirements specified in Appendix A to Federal Aviation Regulations Part 27, as appropriate, and do not contain any incorrect terminology or incorrect references. These ICA were found to contain a Cover Page, Log of Accepted Revisions, Revision Control Procedure and Record of Revisions, a List of Effective Pages, and a Table of Contents. No determination as to correct spelling, proper grammar, or accuracy of the information was made by the FTW AEG. For ICA having a required Airworthiness Limitations Section (ALS), the ICA will be acceptable when this page has been signed and dated by the FTW AEG and the ALS is approved by the Aircraft Certification Service. When the ICA do not require an approved ALS, the ICA will be acceptable when this page has been signed and dated by the FTW AEG.

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RECORD OF REVISIONS

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DETAILS OF REVISIONS

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RECORD OF SERVICE BULLETINS (S/B'S)

S/B NO.	DATE	DESCRIPTION

LIST OF EFFECTIVE PAGES

LIST OF REVISIONS Revision N/C 97Oct02

LIST OF EFFECTIVE PAGES

Title		Page	Revision No.
Cover		1	N/C
Log of Accepted Revisions		2	N/C
Record of Revisions		3	N/C
Details of Revisions		4	N/C
Record of Service Bulletins		5	N/C
List of Effective Pages		6	N/C
Table of Contents		7	N/C
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1.0 INTRODUCTION

1.1 Scope

This manual provides description, operation, disassembly, assembly, repair and testing instructions and an Illustrated Parts List for the 20331 Series Utility Helicopter Floats. The equipment is manufactured by Apical Industries, Incorporated, Oceanside, California.

1.2 Purpose

The purpose of this manual is to maintain the Eurocopter AS-350 Utility Helicopter Float System in peak operating efficiency with the greatest service life.

1.3 Revision Control Procedure

All revisions to this document shall be controlled by the Apical Engineering Change Notice procedure. Each revision will be indicated with a vertical change bar. Each revised page shall display the next revision letter and all pages will be summarized on page 6, “List of Effective Pages.”

The final sign off shall be by the Fort Worth AEG Office on page 2, “Log of Accepted Revisions.”

1.4 Service Difficulty Reporting

Service Difficulty Reporting shall utilize the form included as Attachment 1.

1.5 Applicability

This manual shall be used to maintain the utility floats for the Eurocopter AS-350.

1.6 Abbreviations

psi = pounds per square inch
psig = pounds per square inch gauge
ft. lbs. = foot pounds
in. lbs. = inch pounds
º F = degrees Fahrenheit
º C = degrees Celsius
Hg = mercury
PRV = pressure relief valve
P/N = part number
F/N = find number
LH = left hand
RH = right hand

1.7 Precautions

The following precaution definitions will be used to indicate the seriousness of the hazard or condition.

WARNING: May be a maintenance procedure, practice, condition, etc., which could result in personal injury or loss of life.

CAUTION: May be a maintenance procedure, practice, condition, etc., which could result in damage or destruction of equipment

NOTE: May be a maintenance procedure, practice, condition, etc., or a statement which needs to be highlighted.

1.8 Units of Measure

psi = pounds per square inch
psig = pounds per square inch gauge
ft. lbs. = foot pounds of torque
in. lbs. = inch pounds of torque
º F = degrees Fahrenheit
º C = degrees Celsius

1.9 Distribution

This manual will be distributed with each AS-350 Utility Float System purchased. It will also be available to float end users (or their mechanics or maintenance departments), Repair Stations and other companies by request only. A log of all recipients of this manual shall be maintained by Apical. Any changes to this manual shall be distributed to all recipients.

1.10 Description of the System and Installation

This equipment has been constructed to incorporate an aerodynamic design shape for installation on Eurocopter AS-350 helicopters by means of a reinforced fabric attachment girt, making the aircraft completely amphibious and increasing its operational capabilities.

The utility flotation assembly includes the following:

- Two uninterchangeable floats. Each float consists of six separate air-holding chambers. The chambers are separated by bulkheads made of the same urethane coated nylon as the tube to minimize the loss of buoyancy in the event of puncture or tear. Each chamber contains a topping valve for manual inflation and a pressure relief valve (PRV) to prevent over-pressurization.

- The material color is white which provides radiant heat reflection or an optional fabric color is black. The float design provides for permanent inflation and full time buoyancy for helicopters assigned to off-shore or other over water activities. Abrasion-resistant chafing material located on the underside of each float and the reinforcement of the personnel walkways are incorporated to provide additional abrasion protection.

TABLE I. FLOAT CHARACTERISTICS

Material	Urethane coated nylon
Ship set inflated volume	129.8 cubic feet
Ship set inflated buoyancy	8100 pounds
Operating pressure	2.00 psi
Type of inflation	Compressed air or nitrogen *
Total ship set weight	90.0 pounds (approximately)

***** Do not mix gases. Use either air or nitrogen.

SECTION 4.0 AIRWORTHINESS LIMITATIONS

No airworthiness limitations are associated with this STC.

SECTION 5.0 INSPECTION REQUIREMENTS AND OVERHAUL SCHEDULE

5.1 Inspection Requirements

5.1.1 Semi-Annually

Conduct a walk around the LH and RH float assemblies and inspect for damaged areas. Any chafing, break or hole in the coated fabric is suspect and should be investigated. If damaged, refer to float field repairs in Section 25.1.

CAUTION

For the utility float exterior surface, care must be taken when using the degreaser from LPS Laboratories, "LPS Instant Super Cleaner/Degreaser", or any similar solvent to clean the helicopter rotors or airframe exterior.

The float exterior surface should be covered with a tarpaulin prior to "LPS" exposure or flushed off with water if the float exterior surfaces has been exposed to "LPS".

5.1.2 Annually

a. Inspect the girt for condition, function and security. If the girt is damaged in any way, see Table III.

b. Conduct the annual float leak test in accordance with Section 25.1.5 and inspect for chafing or damaged areas.

5.2 Component Overhaul Schedule

Component P/N	Component Nomenclature	Time Between Overhaul	Section
20331-101	Float LH	3 years	25.1
20331-102	Float RH	3 years	25.1

SECTION 9.0 TOWING

Ground towing must be accomplished utilizing a dolly.

SECTION 11.0 PLACARDS

11.1 Placard Information

Placard P/N 20377-1. See Figure A.

11.2 Location

Mount Placard on instrument panel in plain view of pilot.

11.3 Application

Placards contain an air curing pressure sensitive adhesive. Pry off to remove. To install, remove paper backing, and apply pressure. Allow to remain undisturbed for 24 hours.

WARNING
MAXIMUM PERMISSIBLE INDICATED AIRSPEED
WITH FLOATS INFLATED IS 120 MPH
(104 KNOTS) ON HIGH SKID GEAR

Figure A. Placard 20377-1

SECTION 25.0 FLOAT REMOVAL, CLEANING, TESTING, FIELD REPAIRS AND REINSTALLING

25.1 Floats

Note

Annual leak test may be accomplished with floats mounted on skid tube.

25.1.1 Float Removal from Aircraft

Deflation of float for removal from aircraft shall be accomplished prior to attempting the removal of the float from aircraft struts. Test adapter P/N A-51219N may be inserted into the topping valve to deflate or valve poppet may be depressed manually to allow air to escape. After floats are deflated the floats may be removed from the aircraft by removing bolts, washers and nuts as listed in Figure C.

25.1.2 Table II

TABLE II. CONSUMABLE CLEANING MATERIALS REQUIRED

Description	Availability
Cleaning Solvent - Methyl Ethyl Ketone (MEK)	Commercially available
Stiff bristle brush	Commercially available
Soft bristle brush	Commercially available
Detergent	Commercially available

25.1.3 Table III

TABLE III. VISUAL CHECK OF ASSEMBLIES AND COMPONENTS

Component	Check Procedure	Disposition
Fabric/Seams	Cuts, tears, punctures, abrasions (mark with chalk if discrepant).	See Repair (Section 25.1.6). If beyond limits, return to factory.
Pressure Relief Valve (PRV)	Leaks, opening and closing pressure only - see Testing (Section 25.1.5).	If valve leaks, replace it (Section 25.1.6.4). Flange leaks, return to factory.
Topping Valve	Leaks only - see Testing (Section 25.1.5).	If valve leaks, replace it (Section 25.1.6.4). Flange leaks, return to factory.
Girt Assembly	Condition, function and security	Return to factory for repair.

CAUTION

The working area for inspection should be covered with a clean tarpaulin, carpeting or equivalent protection, free of hardware, tools and other sharp objects.

25.1.4 Cleaning

a. Use good shop safety precautions and practices at all times when using solvents.

WARNING

USE FLAMMABLE SOLVENTS ONLY IN WELL VENTILATED AREAS. DO NOT INHALE FUMES.

Note

Do not apply cleaning solvent to float decals or stencil markings.

b. Cleaning Float Assembly - If Necessary

1. Clean float assembly fabric surfaces using detergent soap and water solution or cleaning solvent. (Detergent soap and water solution is the preferred method.) See Table II. Cleaning Materials Required.

2. Apply cleaning solvent (see Table II) with a clean, soft cloth or a soft bristle brush for areas of oil, dust or dirt. Immediately remove excess solvent with clean soft cloth and dry using compressed air (shop air). The compressed air source should be oil and moisture free and should be equipped with a 20 micron filter for best results.

25.1.5 Testing

Perform a float pressure test annually and also following the overhaul of float assemblies before returning the equipment to service. The relief valve and topping valve tests shall be performed in conjunction with trouble shooting information (Table VI), during the annual inspection and as part of the float pressure test if replacement or repair of those components was accomplished during overhaul.

a. Float Pressure Test (See Table IV)

1. Inflate all chambers of the assembly using shop air to 2.0 psig. (Inflate in 0.5 psig increments.) Measure pressure in each compartment with mercury manometer or pressure gauge (calibrated in increments not greater than 0.1 psi) connected to topping valve.

2. Allow the inflated float to stand for one hour after initial inflation. Then check and readjust pressure in each compartment, if necessary, to 2.0 psi. Record temperature and barometric pressure.

3. Allow the float to remain undisturbed for 24 hours. The maximum allowable pressure drop is 0.50 psig after correction for temperature and barometric variations.

4. Record the compartment pressures, the temperature and barometric reading at the end of the pressure test. Correct for temperature variations by subtracting 0.1 psig for every 3° F rise in temperature, or adding 0.1 psig for every 3° F drop.

5. Correct for barometric conditions by adding 0.1 psig to the final gauge reading for every 0.2 inches of mercury that the barometric pressure had increased, or subtract 0.1 psig from final reading for every 0.2 inches of mercury that the barometer has fallen.

6. If the corrected pressure falls below specified limits, inflate the float to 2.0 psig and check for leaks by swabbing the tubes with leak solution, using a soft brush. (Table II.)

b. Topping Valve Leakage Test

This valve may be checked as part of the float pressure test while it is inflated to 2.0 psig.

1. Apply leak solution (Table IV) with brush at mounting patch to float attachment location. If bubbles indicate a leak, the float assembly must be returned to the factory for replacement of the valve flange/base.

2. If leakage is due to valve not seating properly, check threads in base, on float valve. If damaged base, return to factory. If damaged valve threads, remove and replace. (See Figure B. Valve Removal and Replacement.)

c. Pressure Relief Valve Test

This valve may be checked following conclusion of the Float Pressure Test.

1. Apply leak solution (Table IV) with brush at mounting patch to float attachment location. If bubbles indicate a leak, the float assembly must be returned to the factory for replacement of the valve flange/base.

2. Fill the relief valve aperture with clean water. Slowly raise the compartment pressure and watch for bubbles indicating that the valve opens. Then reduce pressure watching for a cessation of bubbles.

3. The valve should open at 4.0 psig ± 0.25 psig and should close by 3.0 psig.

4. If valve operates improperly, apply leak solution (Table IV) in aperture of valve. If bubbles indicate a leak at this location, remove valve from base flange and check threads in flange base and on valve. If threads in flange are damaged, return float to factory for repair/replacement. If valve threads are damaged, replace as specified. (See Figure B.)

TABLE IV. TESTING EQUIPMENT/MATERIALS REQUIRED

Equipment	Description/Function	Supplier
Manometer	Scale increments not more than 0.10 psi. Range: 0 - 120 in. Hg.	Note 3 Optional
Pressure Gauge	Increments not greater than 0.1 psi	Note 3 Optional
Barometer	Scale increments not more than 0.10 in. Hg.	Note 3 Optional
Stopwatch	Plain timer, 0.10 second graduations	Note 3 Optional
Thermometer	Scale increments not more than 1° F	Note 3 Optional
Leak Test Solution	Leak test Detergent soap and water solution	Optional

Note: Test set up information:

1) Testing of components is accomplished on the float assembly with all components assembled as an operational system. Special fixtures and test benches are not required.

2) Attachment of inflation shop air source or manometer testing equipment to the float assembly is accomplished using the topping valves and adapters.

3) Supplier(s) - "Optional" Equipment required shall be the type of equipment that can be calibrated for assurance of accuracy.

25.1.6 Field Repairs - Fabric And Seam Repairs

The following repairs will be confined to the patching of punctures, tears, and holes not greater than 3 inches in diameter or 2 inches by 10 inches in length. Replacement of complete section or bulkheads shall not be attempted in the field since operating integrity and/or air retaining capabilities of the float shall be affected. All major repairs shall be accomplished at a certified repair depot or factory facilities. Repair kit items are as follows:

TABLE V. HELICOPTER FLOAT REPAIR KIT ITEMS

Item	Quantity
5 inch diameter repair patches	4
4 x 12 inch rectangular patches	2
6 x 14 inch rectangular patches	2
8 ounce tube of adhesive with brush	1
Adhesive information sheet	1
Wrench B-51025	1
Topping up valve B-51209	1
PRV valve B-51019-4	1
Instruction sheet	1
Test adapter A-51219N	1

25.1.6.1 Cement Bonding

PROJECT	WASHING	ACTIVATING	ADHESIVE
Urethane Coated Fabric	MEK 100%	MEK 100%	LA 4123 or equivalent

a. All mixing containers, cans, stirrers and mixing equipment shall be clean and free of any dirt, contamination and dried adhesive.

b. Supplies

1) Cloth, lint-free undyed or white cotton, cut to about 8” square.

2) Brush, utility, size suited to the bond area.

3) Solvent containers:

Safety storage can for solvent
Pump (plunger) can
Brush container with cover
Rag can with cover
Solvent waste can
Spent rag can

4) Hand tools:

Pusher, plastic or metal
Roller

To ensure a proper bond, use the chart below to determine the minimum size patch to be used, if applicable.

Size of tear	Minimum overlap on all sides of damaged area
up to 1/8 inch	1 inch
1/8 inch to 2 inches	2 inches
2 inches to 10 inches	inside patch - 1 inch outside patch - 2 inches

25.1.6.2 Holes, Cuts, Tears And Punctures Up To 3 Inches

a. Using a clean cloth, dry the surface to which the patch is to be applied.

b. If surface cannot be cleaned due to build up of chemicals, use sandpaper to abrade area to be bonded until achieving a dull appearance.

CAUTION

c. Do not touch or handle the cemented areas because oils in the fingers can contaminate the adhesive. Check for dryness by touching with the back of the hand or knuckles only.

d. Adhesives have a limited pot life, which means that the adhesive will "go bad" after a specified length of time. Adhesives may not be used after their pot life has expired, as indicated on the container label. Dispose of expired cement appropriately.

e. The adhesive bond develops increasing strength over a period of days.

CAUTION

Cemented components should not be tested or inflated until the initial cure period specified below. Product should not be packed until the final cure period as specified below.

Adhesive Pot Life and Cure Times

Supplier	Grade	Pot Life	Initial Cure	Final Cure
Apical Industries	LA 4123	6 hours	12 hours	48 hours

f. The adhesive bonding process is effected by environmental conditions of temperature and humidity. Low temperatures will slow drying and cure times. Adhesive bonding cannot be performed at temperatures lower than 55° F.

High humidity may cause moisture to condense on the bond area, as indicated by a foggy white appearance on the cement or component. Before applying additional cement or before activation, flash (evaporate) the moisture by wiping lightly with additional solvent.

g. Clean the bond area as follows:

1) Fold a clean cloth in half, then in half again to form a square. Dampen the cloth with solvent. Squeeze the excess solvent from the cloth, back into the pump can screen.

2) Wash the bond area by wiping in one direction only to remove all visible contamination and release agents. Do not wipe back and forth as this only smears contaminants.

3) Refold the cloth as necessary to keep a clean wiping surface. Each cloth should give eight wiping surfaces. When the cloth is soiled, dispose of it and all chemicals properly.

h. Allow the cleaning solvent to evaporate completely before applying adhesive.

Note

When washing coated fabric, do not allow excess solvent to collect at the edges of seams. Do not apply solvent to decals or stencil markings (whenever possible) since they can be removed by the solvent.

i. Apply the first coat of adhesive to the bond area as follows:

1) Brush a uniform coat of adhesive onto the bond area, rubbing the adhesive firmly into the fabric or component.

2) Allow the first coat to air dry completely before proceeding. Check dryness with the back of your knuckle.

3) Close the adhesive container when not in active use.

j. Apply the second coat of adhesive to the bond area as follows:

1) Brush a second uniform coat of adhesive onto the bond area, painting the adhesive lightly over the first coat.

2) Allow the second coat to air dry completely before proceeding. Check dryness with the back of your knuckle.

3) Close the adhesive container when not in active use.

k. Activate the adhesive by one of the following methods:

1) To solvent activate: Wipe both cemented surfaces lightly but thoroughly with a clean cloth dampened with solvent. Join the components per step (l) within 15 seconds of activating.

2) To heat activate: Direct the flow from a hot air gun over both cemented surfaces. Avoid applying too much heat which may melt the coating or component. When the adhesive feels tacky, immediately proceed to join the components per step (l).

l. Join the components as follows:

1) Once activated, immediately align the two mating surfaces and press together in a wallpapering fashion. Use a pusher or roller to expel any entrapped air.

2) Press with a pusher or roller over the entire activated area to ensure complete contact.

3) When a component is bonded over a seam, tape or other uneven base, press firmly at the edge of the step-off first to avoid bridging. Then bond the remainder of the component.

4) Apply the patch gradually from the center to the edges to minimize the possibility of air bubbles being trapped beneath the patch.

5) Using a smooth edge putty knife and starting at the center of the patch, apply pressure and move toward the edge of the patch, pushing out any air bubbles or wrinkles. Take special care when pushing the edge of the patch to prevent the edges from lifting.

6) When all wrinkles and air bubbles have been eliminated, uniformly roll the joined area using a hand roller.

m. After the patch has dried for approximately 2 hours, the repaired area may be inflated to a maximum of 1.0 psi. After the repair has dried for 24 hours, the product may be inflated to working pressure and tested in accordance with testing instructions in this manual.

n. Clean and inspect the bonded area as follows:

1) Clean any adhesive drops and excess adhesive outside the required bond area by wiping with a clean cloth dampened with solvent.

2) Inspect for location, overlap, lifts, wrinkles and air bubbles. Reactivate and join to repair these defects.

o. Allow the bonded components to cure undisturbed.

25.1.6.3 Holes, Cuts, Tears And Punctures Up To 2 x 10 Inches

Note: These instructions are for repairs to fabric tears that are limited to a 2 x 10 inch maximum tear (curved or straight).

CAUTION

Repair tears by patching both the inside and the outside surfaces of the fabric prior to inflating the float.

a. Trim off loose threads using scissors.

b. Sprinkle a handful of powdered soapstone or talc inside the float opposite the tear area to prevent joining the inside surfaces of the fabric together.

c. Using a clean cloth, dry all surfaces to which the patches will be applied.

d. Thoroughly clean the inside surface of the fabric around the tear and the underside of one of the patches using a cloth dampened with solvent.

e. Apply adhesive and activate surfaces as instructed in 25.1.6.2 i., j. and k. above.

f. Fold the patch in half lengthwise and pass the patch through the tear and install it cement side up on the inside surface of the float fabric directly under the tear.

g. Immediately apply pressure with a hand roller to bond the patch to the inside of the fabric. Pressure is important for a good bond.

h. If surface cannot be cleaned due to build up of chemicals, use sandpaper to abrade outside surface of area to be bonded until achieving a dull appearance.

i. Thoroughly clean the outside surface of the fabric around the tear and the underside of the other patch using a cloth dampened with solvent.

j. Apply adhesive and activate surfaces as instructed in 25.1.6.2 i., j. and k. above.

k. Apply the patch gradually from the center as instructed in 25.1.6.2 l., m., n. and o. above.

25.1.6.4 Valves (Repair And Replacement)

Pressure relief valves (PRV) and the topping valves used in the float assemblies shall be inspected for leaks, cleaned as required and if faulty should be replaced. Valves may be removed and reinstalled using a valve wrench B-51025. See Figure B for valve removal and replacement.

a. Using special tool (valve wrench B-51025) remove valve by inserting wrench into molded flange and turn counter-clockwise to remove valves. Insert wrench slot over molded tab of topping valve and turn counter-clockwise.

b. Check threads in recessed molded fitting bonded in the float and, if necessary, clean using a dry cloth or soft bristle brush. If discrepant, replace at factory.

c. Insert valve into threads of recessed molded fitting and turn clockwise by hand to ensure that threads are not crossed. Continue to turn by hand until valve is seated. Attach wrench, turn clockwise and torque to 30 - 40 inch pounds.

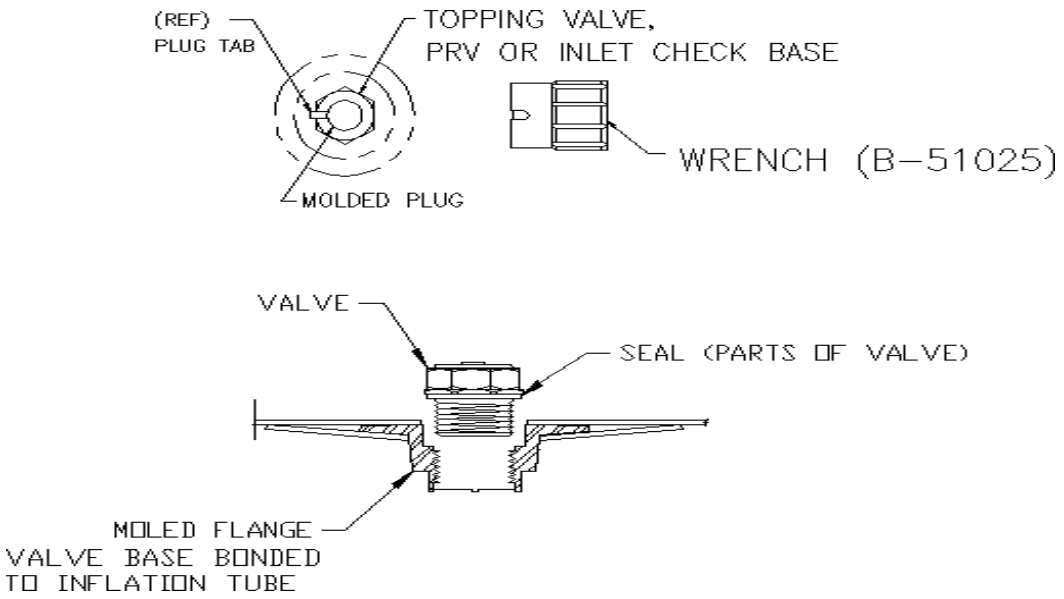

Figure B.
Valve Removal and Replacement - PRV and Topping Valve

25.1.6.5 Table VI.

TABLE VI. TROUBLE SHOOTING
FLOAT WILL NOT MAINTAIN OPERATING PRESSURE

Probable Cause	**Remedy**
Hole in fabric	Patch hole. See 25.1.6.2.
Tear in fabric	Patch tear. See 25.1.6.3.
Leaking PRV **	Check threads. See 25.1.3.
Leaking topping valve **	Check threads. See 25.1.3.

** Denotes the following: if valve leaks at the mounting base, return float assembly to factory for repair/replacement.

25.1.6.6 Table VII.

TABLE VII. SPECIAL TOOLS

Apical Part Number	**Nomenclature**	**Application**
B-51025	Valve Wrench	Removal and installation of all float valves
A-51219N	Test Adapter	Accepts gauge to test float psi

25.1.6.7 Table VIII.

TABLE VIII. REPAIR MATERIALS REQUIRED

Material/Equipment	**Specification and/or Vendor Designation**
Float material	Identification: L2030UPW; Apical Industries, Inc.
Adhesive	LA 4123; Apical Industries, Inc.
Activating agent	Methyl Ethyl Ketone (MEK)
Brush, 1” wide	Commercial - solvent resistant
Spatula (pusher) or dull putty knife	2 1/4” x 4”; Apical Industries, Inc.
Cotton cloths	Commercial waste - clean and soft

25.1.7 Reinstalling Floats

a. Reinstall float and install shoulder bolts (F/N 4), washers (F/N 3) and washers (F/N 6) through the skid so that they extend past the inboard side of the girt. See Figure C.

b. After installing all of the bolts through the skid, position the washers (F/N 6) and lock nuts (F/N 5) as shown in Figure C.

c. Hand tighten all the nuts so that they are secure.

d. With a torque wrench, tighten the nuts from the forward end of the float to the aft, using the specified torque value of 20 - 25 in. lbs.

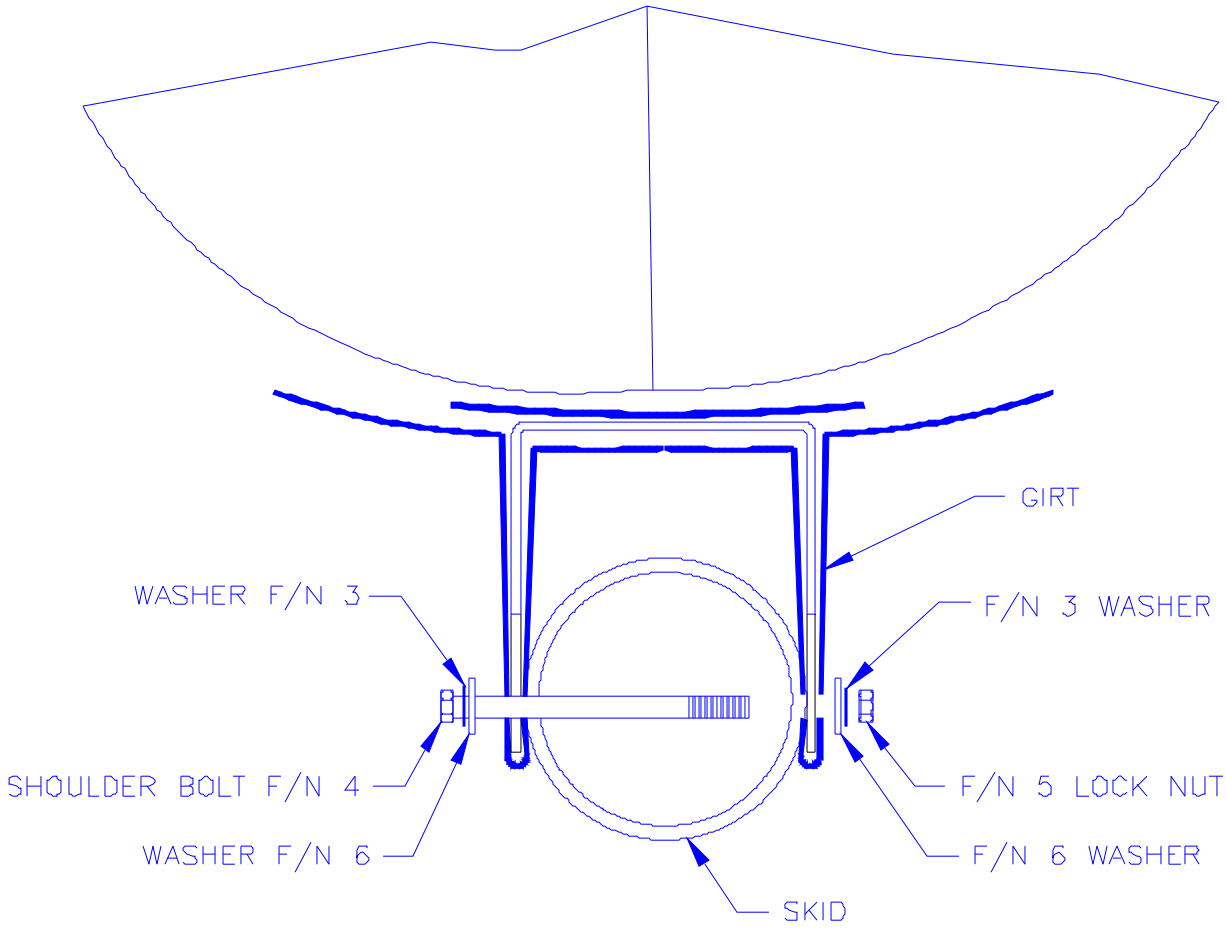

Figure C. Float Attaching Hardware

25.1.8 Completion of Installation

a. Inspect utility float installation to ensure all components are secured.

b. Open fill valves and inflate the six float chambers with compressed air to 2.0 psig. Inflate chambers gradually to maintain equal volume in each chamber. Close fill valves.

25.2 Illustrated Parts List

See the following figures (Figure D and E) for part locations.

F/N	Qty	Description	Part No.
	1	Top assembly including LH float and hardware	20331-101
	1	Top assembly including RH float and hardware	20331-102
1	1	Float Bag - LH	20331-201
2	1	Float Bag - RH	20331-202
3	72	Washer	AN960C10
4	36	Shoulder Bolt	20378
5	36	Lock Nut	90715A611
6	72	Washer	90313A104
7	1	Placard	20377-1
8	12	Topping Valve	B-51209
9	12	Pressure Relief Valve	B-51019-4

Figure D. Utility Float

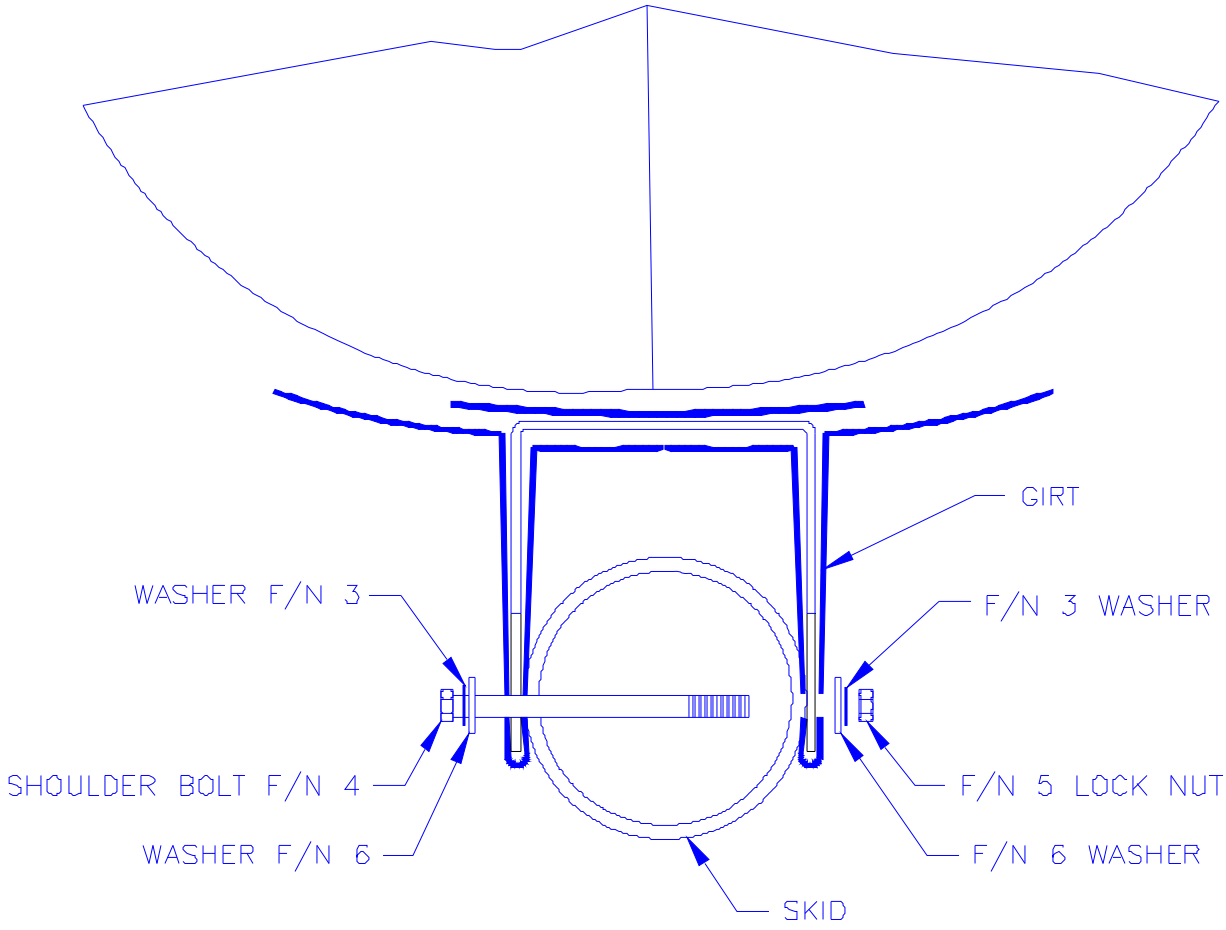

Figure E. Float Attaching Hardware

SEMI-ANNUAL INSPECTION WORKSHEET

HELICOPTER REGISTRATION NO. _____

Signature and Date
1.
2.
3.
4.
5.
6.

Remarks

Semi-Annual Inspection #: 1st 2nd 3rd 4th 5th 6th

1. Inspect floats for chafing, breaking or holes. _____

ANNUAL INSPECTION WORKSHEET

HELICOPTER REGISTRATION NO. _____

Signature and Date
1.
2.
3.
4.
5.
6.

Remarks

Annual Inspection:		Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
1.	Inspect the girt for condition, function and security.						
2.	Conduct annual float leak test. Inspect floats for chafing or damaged areas.						

3 YEAR INSPECTION WORKSHEET

HELICOPTER REGISTRATION NO. _____

Signature and Date
1.
2.
3.
4.
5.
6.

Remarks

3 Year Inspection:	Year 3	Year 6	Year 9	Year 12	Year 15	Year 18
1. Conduct float leak test. Inspect floats for chafing or damaged areas.						